

Abstract

An electrochemical analyte sensor formed using conductive traces on a substrate can be used for determining and/or monitoring a level of analyte in *in vitro* or *in vivo* analyte-containing fluids. For example, an implantable sensor may be used for
5 the continuous or automatic monitoring of a level of an analyte, such as glucose, lactate, or oxygen, in a patient. The electrochemical analyte sensor includes a substrate and conductive material disposed on the substrate, the conductive material forming a working electrode. In some sensors, the conductive material is disposed in recessed channels formed in a surface of the sensor. An electron transfer agent and/or catalyst
10 may be provided to facilitate the electrolysis of the analyte or of a second compound whose level depends on the level of the analyte. A potential is formed between the working electrode and a reference electrode or counter/reference electrode and the resulting current is a function of the concentration of the analyte in the body fluid.

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